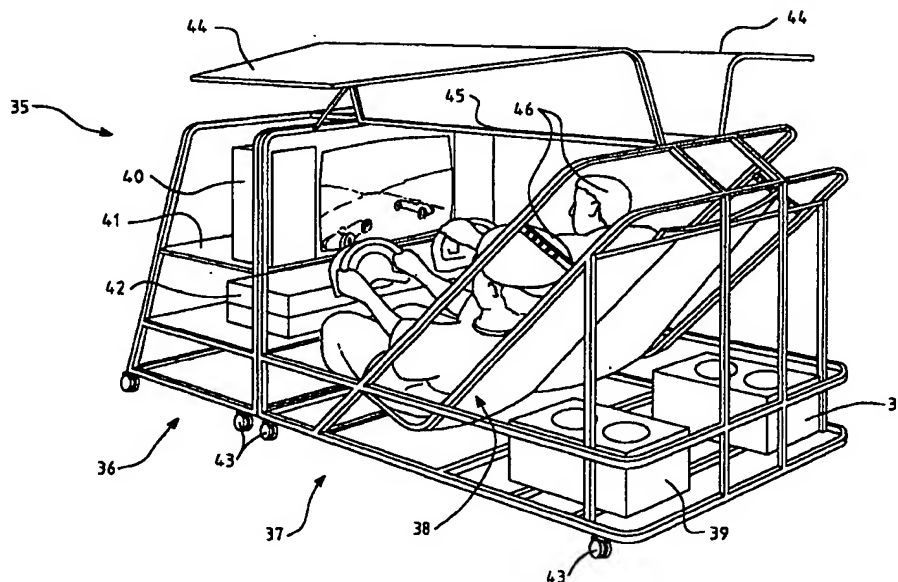


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(54) Title: MINI-THEATRE AND FRAME ASSEMBLY THEREFOR**(57) Abstract**

A mini-theatre suitable for use in the living room of a home is assembled by releasable connection of the rear support unit (37) to a front support unit (36) of a frame assembly (35). The rear support unit (37) is adapted to support at least a first person in a position which allows that person to operate an entertainment device such as a video game mounted within the frame assembly. The frame assembly includes cover means (44) to removably cover substantially the entire frame assembly thereby to increase the ambience of a player's experience. In particular forms at least the rear support unit is foldable or otherwise disassemblable in order to provide convenient stowage whilst leaving the front support unit in place.

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MINI-THEATRE AND FRAME ASSEMBLY THEREFOR

The present invention relates to a mini-theatre and frame assembly therefor and, more particularly, to a mini-theatre and frame assembly therefor particularly suited to the playing of computer games and the like in a domestic environment.

Background

Various forms of entertainment devices are known including television sets, home computers and stereo systems. When used separately in the home it has been difficult heretofore to deliver a sensory experience having real impact.

A further problem is that control over the entertainment devices, particularly where there is more than one contributing to the sensory experience is inconvenient and/or not adequate.

It is an object of the present invention to address these shortcomings or at least provide a useful alternative.

Brief Description of the Invention

In one broad form of the invention there is provided a frame assembly for a home entertainment mini-theatre, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment device; said rear

support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device; said front support unit independently connectable to said rear support unit.

5 In a further broad form of the invention there is provided a frame assembly for a home entertainment mini-theatre, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment
10 device; said rear support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device; said frame assembly including cover means adapted to removably cover substantially the entire frame assembly together with said
15 at least first person and said at least one entertainment device.

 In a further broad form of the invention there is provided a home entertainment mini-theatre assembled by covering the frame assembly as described above.

20 In yet a further broad form of the invention there is provided a frame assembly for a home entertainment mini-theatre, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment
25 device or a 1st portion of said one entertainment device; said rear support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device or a 2nd portion of

said one entertainment device; said front support unit independently connectable to said rear support unit.

In yet a further broad form of the invention there is provided a home entertainment mini-theatre, said theatre including a frame assembly, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment device; said rear support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device; said front support unit independently connectable to said rear support unit; said theatre further including cover means adapted to removably enclose substantially entirely said frame assembly together with said at least a first person and said at least one entertainment device, thereby to increase the ambience of a players experience.

In yet a further broad form of the invention there is provided a seating unit for at least one player to operate an electronic game or electronic simulator; said seating unit comprising a base with a back support extending therefrom so as to form a seat for a player or operator of said electronic game or electronic simulator.

Brief Description of Drawings

Embodiments of the invention will now be described with reference to the accompanying drawings wherein:-

Fig. 1 is a perspective view of a frame assembly for use with a mini-theatre according to a first embodiment of the invention,

Fig. 2 is a forward view of the cockpit portion of the assembly of Fig. 1 with entertainment equipment installed

Fig. 3 is a perspective view of a frame assembly according to a second embodiment of the invention with entertainment equipment installed,

Fig. 4 is a perspective view of the front support unit of a frame assembly according to a third embodiment of the invention with some entertainment devices installed,

Fig. 5 is a perspective view of a rear support unit of a frame assembly according to a third embodiment of the invention,

Fig. 6 is a side view of an elbow hinge for use with the assembly of Fig. 4 and Fig. 5.

Fig. 7 is a star hinge for use with the assembly of Fig. 4 and Fig. 5,

Fig. 8 is a tri-hinge for use with the assembly of Fig. 4 and Fig. 5 and

Fig. 9 is a perspective of a telescoping rail assembly for use with various embodiments of the invention,

Fig. 10 is a front view of a shrouding arrangement for use with any of the above described embodiments,

Fig. 11 is a perspective view of a mini-theatre unit according to a further embodiment of the invention shown with the front support unit and rear support unit disconnected,

Fig. 12 is a perspective view of the mini-theatre of Fig. 11 with the front support unit connected to the rear support unit,

Fig. 13 is a side, section view of the mini-theatre of Fig. 11,

Fig. 14 is a further side, section view of the mini-theatre of Fig. 11 showing a user in seated position,

Fig. 15 is a side, section view of a seating unit with console suitable for use with any of the embodiments of the invention,

Fig. 16 is a plan view of the seating unit of Fig. 15,

Fig. 17 is a perspective view of a covered seating unit with console, and

Fig. 18 is a further perspective view of the seating unit with console of Fig. 17 with the cover closed.

Fig. 19 is a perspective, indicative view of the frame assembly incorporating the near actuators thereby to implement a simulator system.

Detailed Description of Preferred Embodiments

With reference to Fig. 1 there is shown a frame assembly 10 according to a first embodiment of the invention comprising a front support unit 11 and a rear support unit 12. In this instance front support unit 11 is joined to rear support unit 12 by means of left connector bar 13 and right connector bar 14.

The front support unit 11 comprises a left A frame assembly 15 and a right A frame assembly 16 joined together

at lower ends by base plate 17 and near the apices by cross bar 18.

Approximately midway in height between base plate 17 and cross bar 18 is located an entertainment device mounting frame 19 comprising, in this instance, a support plate 20 extending between and attached to left A frame assembly 15 and right A frame assembly 16. The entertainment device mounting frame 19 further comprises a support bar 21 which also extends between and is attached to left A frame assembly 15 and right A frame assembly 16 as illustrated in Fig. 1. Support bar 21 includes connector clips 22 for attachment of auxiliary equipment.

The above described components of the front support unit 11 can be made, for example, from mild steel, suitably coated against rusting and welded together.

In this instance, to aid in portability, the front support unit 11 additionally includes castor wheels 23 as illustrated in Fig. 1.

An example of the type of entertainment device or devices which can be supported within front support unit 11 are illustrated in Fig. 2. In this instance they include a television set 24 mounted on support plate 20 and a game module steering or direction device 25 attached via connector clips 22 and adjustable support bars 26 attached, as illustrated in Fig. 2 between the A frame assemblies 15, 16 and a base portion of the game module steering or direction device 25.

In this instance the game module steering or direction device 25 connects to and is part of a Sony (Trade Mark) play station computer game which outputs a video signal to TV set 24 for the playing of video interactive games.

5 A foot pedal unit 27 also inputs to the play station unit 28 whereby a user can operate the foot pedals and also the game module steering or direction device so as to influence the playing of a computer game interactively as it is viewed on the TV set 24.

10 With reference again to Fig. 1 the frame assembly 10 further includes a rear support unit 12 comprising left A frame assembly 29 and right A frame assembly 30 connected together by the legs of the A frames by lower tie bars 31 and at the apices of the A frames by upper tie bar 32 as
15 illustrated in Fig. 1.

The rear support unit 12 supports a seat assembly 33 substantially within the A frame structure as illustrated in Fig. 1.

20 As for the front support unit 11, the rear support unit 12 is moveable as an independent unit on cast or wheels 34.

The unit can be made from mild steel bars, suitably treated against rusting and welded together.

25 The seat assembly 33 is moveable with respect to front support unit 11 (and hence with respect to entertainment devices mounted thereon) by telescopic adjustment of left and right connector bars 13, 14.

A particular example of a telescoping arrangement is provided in Fig. 9. In this instance it comprises a first square cross section bar 47 of external dimension such that it is supportably slidably within second square cross section bar 48 along a common longitudinal axis YY thereof.

With reference to Fig. 3 a second embodiment of the invention is illustrated comprising a frame assembly 35 assembled from sub units comprising a front support unit 36 and a rear support unit 37 made from tubular, metallic components as illustrated generally in Fig. 3.

In this instance the front support unit 36 attaches directly to rear support unit 37 and relative adjustment of seat assembly 38 is performed by tilt and sliding adjustment (by means not shown) of the seat assembly 38 within the rear support unit 37.

In this instance the rear support unit 37 also supports loud speakers 39 mounted behind the seat assembly 38.

As previously the front support unit 36 supports a television set 40 on a base plate 41. In this instance there is a further base plate 42 for support of additional entertainment devices. As for the first embodiment the support units 36, 37 are mounted on caster wheels 43 thereby to assist in assembly of the front support unit to the rear support unit and also in the movement of the assembled frame assembly 35 within, for example, a lounge room or a rumpus room of a house.

The entire frame assembly 35 can be enclosed by hinged flaps 34 which rotate about an upper longitudinal axis 45 between an open position (as illustrated in Fig. 3) and a closed position where the flaps swing downwardly to enclose substantially the entire frame assembly 35 together with players 46 and the entertainment devices.

The result is that the players 46 are enclosed with the entertainment devices in close proximity and seated in a comfortable, fully adjustable manner thereby to improve the ambience of the game playing or like entertainment experience.

In addition the controls of the various entertainment devices are all placed conveniently to hand or can be so placed thereby providing good control over the sensory experience.

Finally, when the assembly is enclosed the absence of significant external light improves sensory feedback to the players from the viewing devices such as the television and also proves the sensory feedback from audio devices such as loud speakers whereby more selective and accurate control over the entertainment experience can be exerted.

It will be noted that the front support units of both embodiments 11, 36 will stand independently from the respective rear support units 12, 37. The front support units, therefore, can act as stands or cabinets for entertainment devices such as television sets and the like in their own right. Hence, in use, a player need only store the rear support unit when it is desired to

disassemble the home entertainment mini-theatre above described.

5 With reference to Figs. 4, 5 6, 7 and 8 a third embodiment of the invention will be described which provides details of a folding structure, thereby to increase the convenience of stowage of the mini theatre.

10 It will be observed that the front support unit of Fig. 4 and the rear support unit of Fig. 5 are substantially similar in structure to the second embodiment illustrated in Fig. 3. Accordingly, like components are numbered as for the embodiment of Fig. 3.

15 In this embodiment both the front support unit 49 and rear support unit 50 can be folded for stowage by use of various combinations of the elbow hinge 51 of Fig. 6, the star hinge 52 of Fig. 7 and the tri-hinge 53 of Fig. 8.

20 Respective joints are like numbered in Figs. 4 and 5 and the end result is that the front support unit 49 of Fig. 4 can fold inwardly about centre line ZZ whilst the rear support unit 50 requires the seat assembly 38 to be folded downwardly in the direction of arrow Q followed by the inward collapse of the assembly about lines RR and SS.

25 The hinged flaps 44 which can be supported in the open position by gas struts 54 can themselves be caused to fold downwardly towards a closed position so as to enclose the folded frame assembly.

In an alternative form the hinged flaps 44 can first be detached by release of flap clamps 55.

The unlabelled arrows in both Fig. 4 and Fig. 5 show the manner of collapse of the various components making up each structure. A preferred covering for the frame assembly is a lycra (TM) fabric either in black or a fashion colour. This material has the advantage that it is stretchy. It is envisaged that other materials can be used to achieve the requisite exclusion of light and formation of a total enclosure.

Fig. 10 illustrates a shrouding arrangement particularly, but not exclusively where the entertainment device is a television 57. In this case the stretch fabric comprises a first shroud 56, a second shroud 58 and a third shroud 59.

The shrouds are pulled tight into perspective edge zones 60, 61, 62, which zones define the perimeter of the TV set 57, thereby providing good sealing against light leakage.

Certain variations can be contemplated:-

For example the frame components can be made from heavy plastic or other structurally suitable material and suitably bonded.

Also the frame covering, instead of a stretch material, can be of more solid constructions as, for example, cardboard or other relatively light opaque laminate. In particular forms the material can be selected for its sound insulation properties, thereby to minimize disturbance to those persons located outside of the mini-theatre.

It will be observed that the arrangement is such as to provide convenience and can include forward/back/tilt adjustment of the game module steering or direction device 25, and can also include storage under the seat assembly 33 for disks or tapes.

Also, in certain versions, seats can be located outboard of the main frame assembly 10.

With reference to Figs. 11 to 16 inclusive there is illustrated a fourth embodiment of the invention comprising a covered frame assembly forming a mini-theatre 70.

In this instance the mini-theatre 70 comprises a front support unit 71 and a rear support unit 72 which are connectable, one to the other by, in this instance, a hook arrangement to be later described in more detail.

Fig. 11 illustrates the front support unit 71 disconnected from and physically separated from the rear support unit 72 as would be the case immediately prior to full assembly or immediately after use where the user intends to pack away the rear support unit 72 and leaving only the front support unit 71 in a living room, for example.

As best seen in Fig. 13 the mini-theatre 70 comprises a number of frame components which define certain edge portions and regions of the mini-theatre 70. These frame components include rear frame 73, mid frame 74, both of which interconnect with lower elongate tube member 75 and upper elongate tube member 76, all forming part of the rear

support unit 72. The front support unit 71 is defined by front frame 77, forward frame 78 and base frame 79.

Attached to the members 73, 74, 75, 76 of rear support unit 72 are panel members comprising rear panel member 80, top and side panel member 81, ledge member 82 and base member 83. In particular it should be noted that top and side panel member 81 comprises a series of hinged panels 81a, 81b, 81c, 81d (not shown but counterpart to 81b), 81e (not shown but counterpart to 81a).

Each of the members 73-76 includes stub portions such as, for example, stub portions 84 of an exemplary portion of rear frame member 73 shown in the inset of Fig. 11. These stub portions 84 are adapted to fit snugly within apertures 85 of exemplary frame member portion 81c as also shown in the inset. The stub portions 84 are of a sufficient length to ensure engagement with the apertures 85 but not too long that they protrude unnecessarily through the apertures 85.

In order to assist retention of panel members relative to frame members velcro tabs such as tab 86 can be utilised again as shown in the inset of Fig. 11.

The front support unit 71 has its frame members 77, 78, 79 covered by a top and side panel member 87 which is comprised of separate hinged panels 87a, 87b, 87c, 87d, 87e.

This member is hinged in the same manner as the top and side panel member 81 of the rear support unit 72.

Finally, the front support unit 71 has a forward panel member 88 made up of hinged panel members 88a, 88b. All of these panel members are attached to the frame members 77, 78, 79 in the same manner as for the rear support unit 72.

5 All of the panel members 80-88 can be made from planar PVC foam or Corflute (TM).

The front support unit 71 is releasably connectable to the rear support unit 72 by means of, in this instance, hook members 89 as shown in the inset in Fig. 13. The hook

10 members 89 are secured to and protrude forwardly from front ends of lower elongate tube member 75 and upper elongate tube member 76. Downwardly pointing tine portions 90 of the hook members 89 engage in aperture 91 within front frame member 77.

15 The tines 90 can be disengaged from aperture 91 by firstly lifting rear support unit 72 relative to front support unit 71 sufficient to allow the tines 90 to disengage from aperture 91 and then move rear support unit 72 away from front support unit 71. A reverse procedure

20 applies for engagement one to the other.

As part of the disassembly process, after the panel members are removed the frame members, particularly rear frame member 73 and mid frame member 74 can be folded downwardly so as to lie substantially parallel with base

25 frame 79. The tube members 75, 76 can be slidably disengaged from the frame.

The left side door 116 and right side door 117, as best seen in Fig. 11 are pivotable about hinge connections

118. The doors 116, 117 are also disassemblable about the hinge connections 118.

5 The front support unit 71 further includes lower enclosures 92, 93, 94, 95 adapted to hold or house, for example, a stereo system. In this instance, above the enclosures 92-95 and defining a top portion of the enclosures is support member 96 adapted to support a television set or like visual display unit (VDU) 97.

10 The stereo unit 98 is shown in side, section view in Fig. 13 supported within one of the enclosures 92-95.

The front support unit 71 is further adapted to support pedal control unit 99 slidably within enclosure 95. The pedal control unit 99 can be a commercially available pedal unit suitable for connection to a "Playstation" or
15 like unit (Trade Mark of Sony Corporation) by a cable tunnel passing, for example, through the inside of the tube members 75, 76 from the front support unit 71 to the rear support unit 72 where the play station unit 100 can be mounted between seats 102, 103 of a seat assembly 101 (as
20 best seen in plan view in Fig. 16).

The seat assembly is mounted within the rear support unit 72 and includes a back portion 104, a seat portion 105 and a desk portion 106 supported from and pivotable with respect to seat portion 105.

25 The desk portion 106 is adapted to support a steering unit 107 or like game control device. In this instance the steering unit 107 is in communication with the play station

unit 100 which, in turn, is in electrical communication with the VDU 97.

Optionally the play station unit 100 can be in communication with the stereo unit 98 thereby to utilise the superior audio capabilities of the stereo unit 98 which, in turn, communicates an audio signal to speakers 108 mounted in a lower, forward position within front support unit 71, as best seen in Fig. 14.

In this instance the desk portions 106 are mounted so as to pivot about a stem 109 which, in turn, is mounted to seat portion 105 as perhaps best seen in Fig. 14. In this case each desk portion 106 pivots about pivot point 110 in the direction of arrow A shown in Fig. 16. Movement of the desk portion 106 in the direction of arrow A about pivot point 110 permits a player 111 access to the seat assembly 101.

Additional devices which can be incorporated within the rear support unit include a light which can be arranged to switch on automatically when the mini-theatre is first fully enclosed as, for example, by closing the access doors. A switch override system can be incorporated so that the user, once within the mini-theatre can control the light from the supported position of the user.

A further accessory of utility is a headphone jack incorporated in the control unit whereby a user/player can connect a set of headphones to bypass the speakers and listen to the audio output of the Playstation unit or equivalent directly via the headphones.

In particular embodiments the seat assembly of Figs. 15 and 16 can be utilised on its own.

With reference to Figs. 17 and 18 a particular embodiment of the seating assembly of Figs. 15 and 16 is
5 illustrated further including a cover unit 113 comprising cockpit 114 and hinged entry door 115.

Virtual Reality/Simulator System

In a further preferred embodiment the front support unit 71 and rear support unit 72 can be mounted on linear
10 actuators 112 (refer Fig. 14) and actuated so as to provide tilting movement to the mini-theatre 70 synchronised with the scene appearing on VDU 97 thereby to give the sensation of actual movement to the player 111.

With particular reference to Fig. 19 a base portion
15 119 of frame assembly 10 is illustrated mounted on linear actuators 120. The linear actuators 120 are in electrical communication with control unit 121. The control unit can cause the linear actuators 120 to tilt the frame assembly
10 in concert with images displayed on VDU 122 thereby to
20 give the sensation of movement to a player or operator seated on the base portion 119.

In this particular example the control unit also receives signals from gear selector 123, pedal unit 124 and steering wheel device 125 thereby to form a "learn to
25 drive" simulator. In alternative forms the player or operator can be seated on a tiltable bike unit rather than on a seat as illustrated in previous embodiments.

In particular forms speaker units (now shown) can be mounted at the rear of the seats or like support devices thereby to provide close range audio input to the player or operator.

5 In alternative forms the actuation units can be other than gear selectors 123 and the like and can, for example, be in the form of a skateboard.

Personal Computer/Internet Interactive Implementation

10 In a further preferred embodiment (not shown) the VDU unit can be replaced by a personal computer video screen and the control unit can be replaced by a personal computer with controls easily accessible to the operator/player when in the supported position within the rear support unit. The personal computer can be connected to the Internet via
15 a telephone line and modem or other wider band width data pathway.

In current implementations it is possible to play video games interactively with players located elsewhere on the Internet. In this implementation all facilities
20 available on the Internet can be made available via the personal computer and its display screen within the mini-theatre.

The above describes only some embodiments of the present invention and modifications, obvious to those
25 skilled in the art, can be made thereto without departing from the scope and spirit of the present invention.

For example, the mini-theatre can be provided with all components fully installed including steering wheel components, control units and the like. In the alternative it can be provided as a basic frame assembly for which the user can purchase subsequently the appropriate cover units and for which the user can purchase their own commercially available game units, television units and the like.

Industrial Applicability

The frame assembly and the resulting mini-theatre has particular, although not exclusive application in the domestic environment whereby already available television units and like entertainment devices can be incorporated into a fully enclosed theatre arrangement in order to improve the ambience of a game players experience.

CLAIMS

1. A frame assembly for a home entertainment mini-theatre, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment device; said rear support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device; said front support unit independently connectable to said rear support unit.
2. The frame assembly of Claim 1 wherein said front support unit is slidably, adjustably joined to said rear support unit.
3. The frame assembly of Claim 1 or Claim 2 further including cover means adapted to removably cover substantially the entire frame assembly together with players and said at least one entertainment device, thereby to increase the ambience of a players experience.
4. The frame assembly of any previous claim wherein said at least one entertainment device includes a video game connected to a television set and audio speakers.
5. In a frame assembly for a home entertainment mini-theatre, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment device; said rear support unit adapted to support at least a first person in a position which

allows that person to operate said at least one entertainment device; said frame assembly including cover means adapted to removably cover substantially the entire frame assembly together with said at least first person and said at least one entertainment device.

6. The frame assembly of Claim 5 wherein said front support unit is independently connectable to said rear support unit.

7. The frame assembly of Claim 6 wherein said front support unit is slidably, adjustably joined to said rear support unit.

8. The frame assembly of any one of Claims 5 to 7 wherein said at least one entertainment device includes a video game connected to a television set and audio speakers.

9. A home entertainment mini-theatre assembled by covering the frame assembly of any one of claims 1 to 4 with a substantially light excluding material.

10. A frame assembly for a home entertainment mini-theatre, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment device or a 1st portion of said one entertainment device; said rear support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device or a 2nd portion of said one

- entertainment device; said front support unit independently connectable to said rear support unit.
11. The frame assembly of Claim 10 wherein said 1st portion comprises a display unit.
- 5 12. The frame assembly of Claim 10 or Claim 11 wherein said first portion includes a foot pedal unit.
13. The frame assembly of Claim 10 or Claim 11 or Claim 12 wherein said 2nd portion comprises a control unit.
14. The frame assembly of Claim 10, 11, 12 or 13 wherein
10 said frame assembly includes hinges and pivot points thereby to render it or at least said rear support unit collapsible for convenient storage.
15. The frame assembly of Claim 10, 11, 12, 13 or 14 wherein said front support unit is slidably,
15 adjustably joined to said rear support unit.
16. The frame assembly of and one of Claims 10 to 15 further including cover means adapted to removably cover substantially the entire frame assembly together with said at least a first person and said at least
20 one entertainment device, thereby to increase the ambience of the playing experience of said at least first person.
17. The frame assembly of any one of Claims 10 to 16 further including linear actuators operable by said
25 control unit of said entertainment device in concert with images displayed on said display unit of said entertainment device so as to tilt said frame assembly

in order to impart a sensation of movement to said at least a first person.

18. A home entertainment mini-theatre, said theatre including a frame assembly, said frame assembly comprising a front support unit and a rear support unit; said front support unit adapted to at least support at least one entertainment device; said rear support unit adapted to support at least a first person in a position which allows that person to operate said at least one entertainment device; said front support unit independently connectable to said rear support unit; said theatre further including cover means adapted to removably enclose substantially entirely said frame assembly together with said at least a first person and said at least one entertainment device, thereby to increase the ambience of a players experience.
19. The mini-theatre of Claim 18 wherein said rear support unit is slidably, adjustably joined to said front support unit.
20. The mini-theatre of Claim 18 or Claim 20 wherein said at least one entertainment device includes a video game connected to a television set and audio speakers.
21. The mini-theatre of any one of Claims 18 to 20 mounted on linear actuators or rams adapted to tilt said mini-theatre under the control of said at least one entertainment device thereby to impart a sensation of movement to said at least a first person.

22. A seating unit for at least one player to operate an electronic game or electronic simulator; said seating unit comprising a base with a back support extending therefrom so as to form a seat for a player or operator of said electronic game or electronic simulator.
23. The seating unit of Claim 22 further including control unit support means extending from said seat adapted to support a control unit of said electronic game or electronic simulator in a position convenient for said player or operator to thereby operate said electronic game or electronic simulator.
24. The seating unit of Claim 22 or Claim 23 further including a cover unit adapted to substantially enclose in light tight manner both said seating unit and said player or operator when in seated position on said seating unit thereby to improve the ambience of the experience of said player or operator.
25. The seating unit of Claim 23 or Claim 24 wherein said control unit is mounted on said control unit support means.
26. The seating unit of Claim 25 wherein said control unit is a steering wheel unit or a joystick.
27. The seating unit of Claim 25 wherein said support means is pivotable from an operating position to a non-operating position and wherein the non-operating position allows easy access of said player to said seating unit.

28. The seating unit of Claim 25 wherein said control unit forms part of a learn to drive unit and includes a left hand gear selector, foot pedals and a steering wheel thereby to mimic the controls of a motor vehicle.

29. The seating unit of any one of Claims 23 to 28 mounted in the frame assembly of any one of Claims 1 to 4.

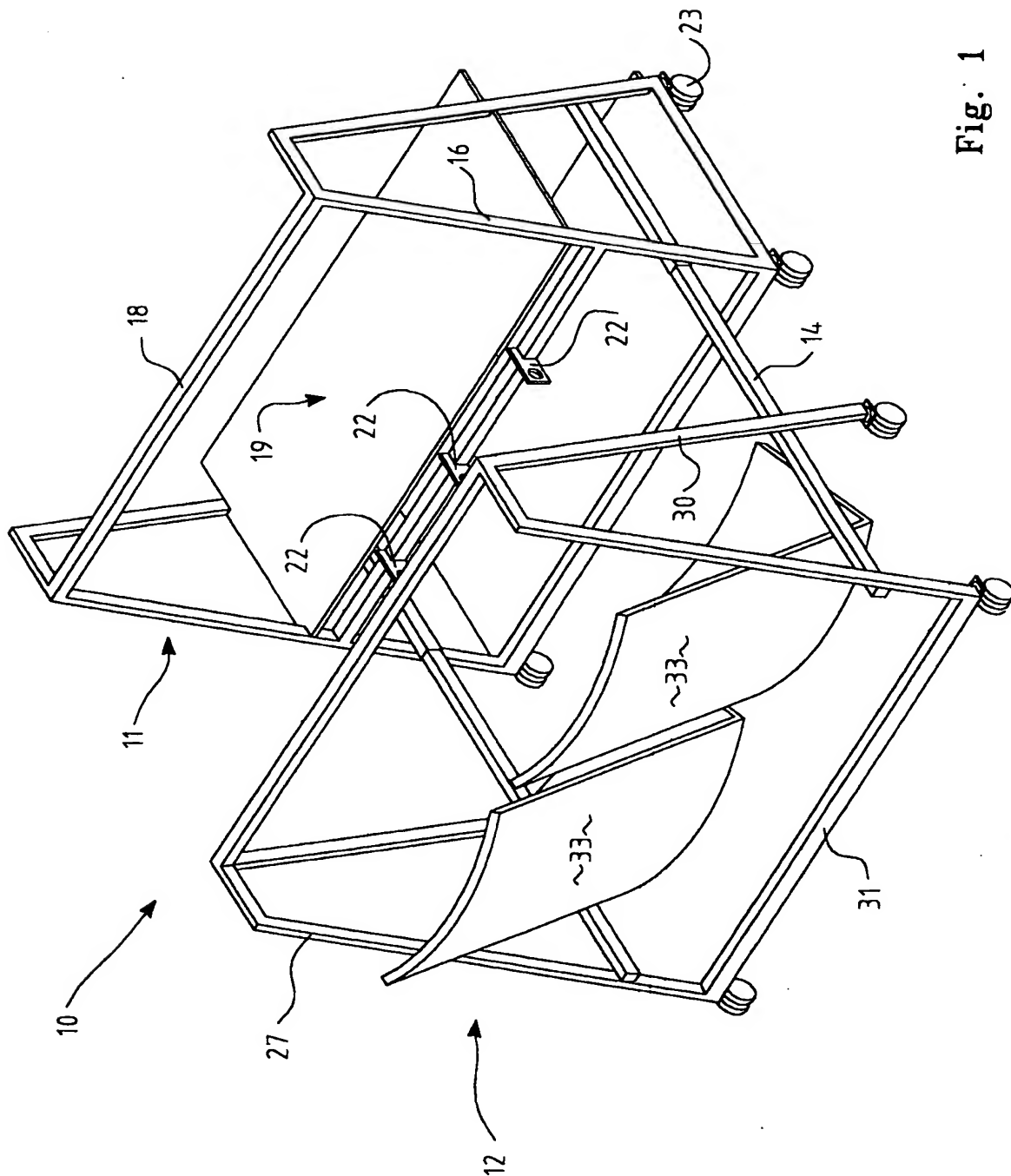


Fig. 1

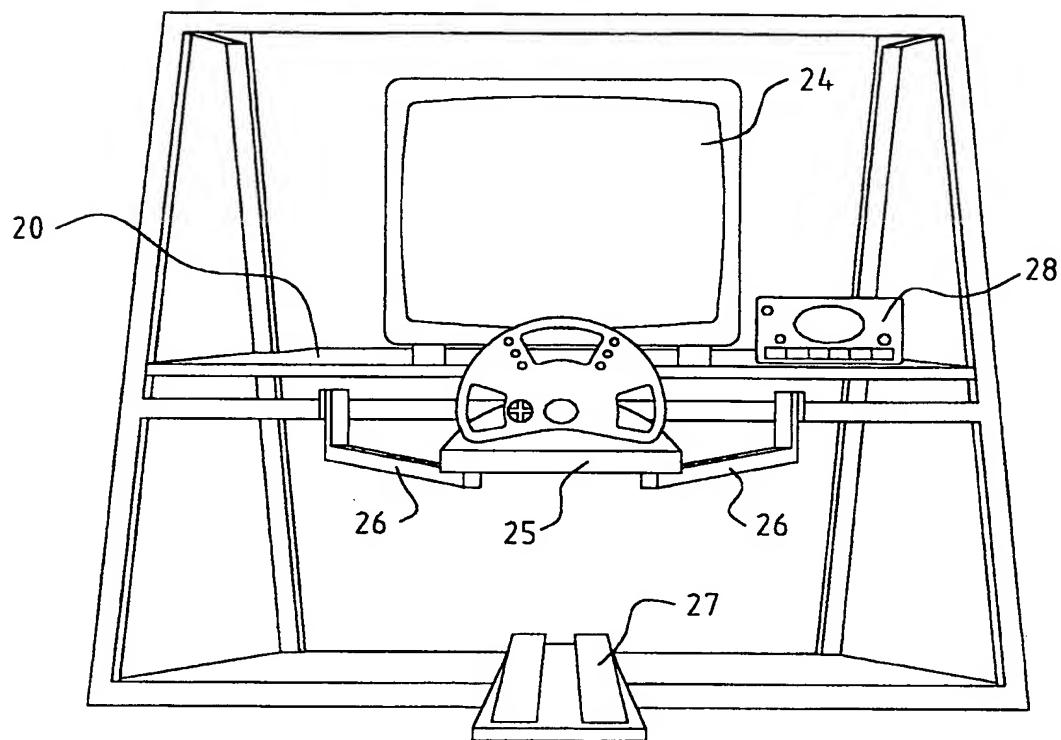


Fig. 2

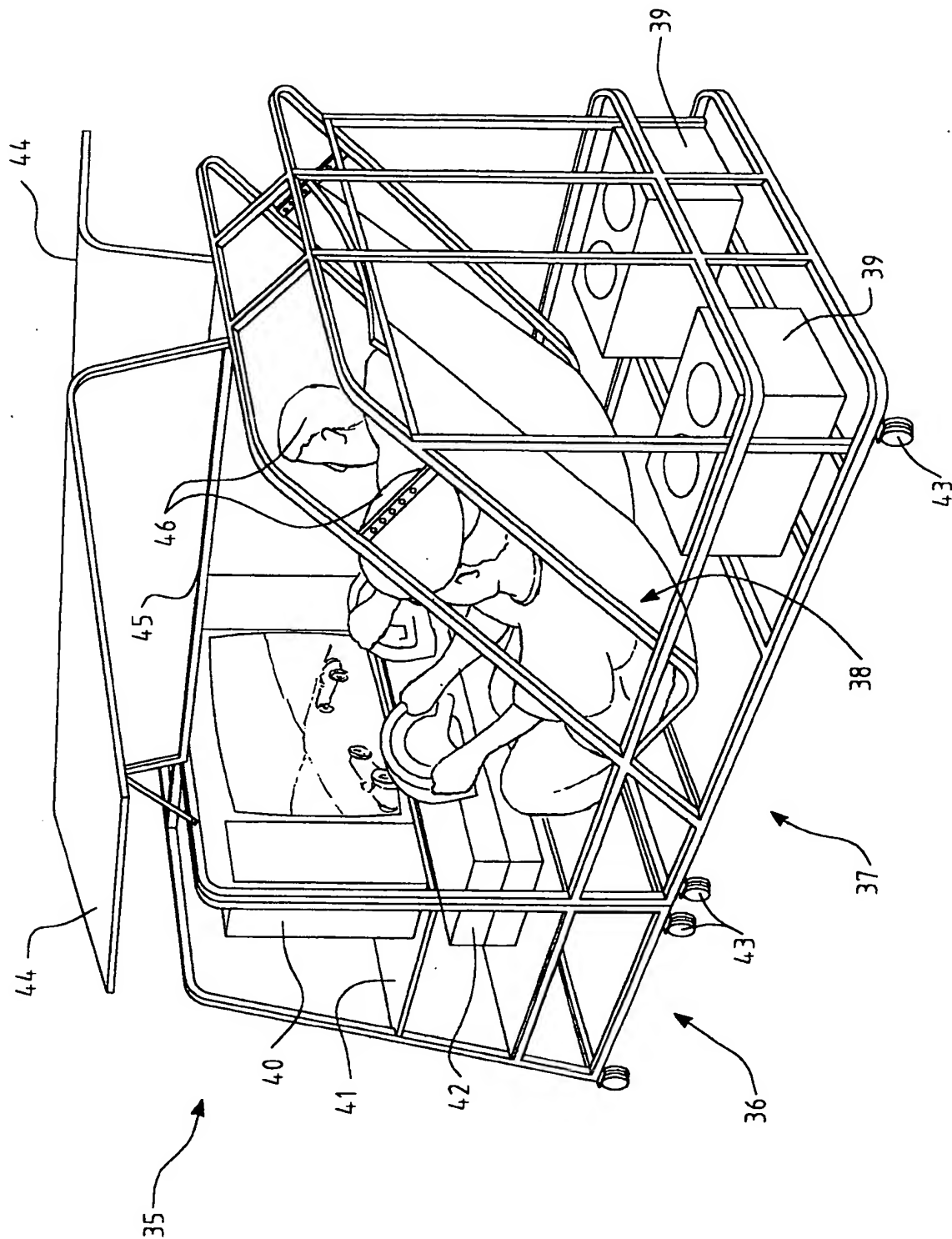


Fig. 3

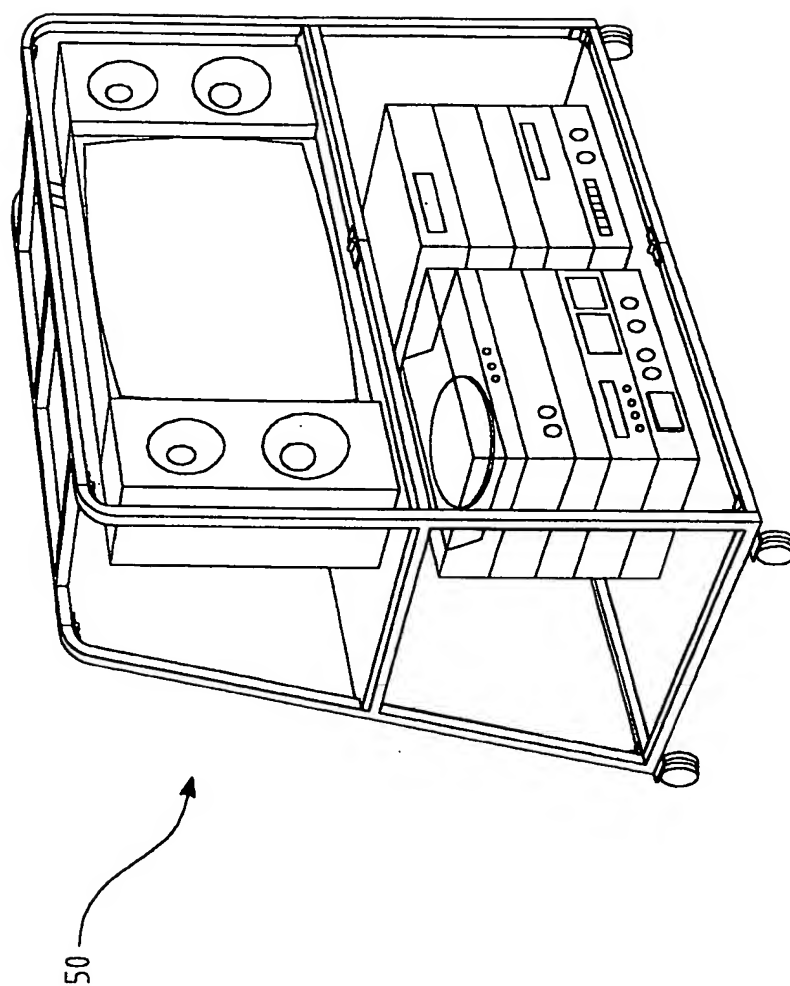


Fig. 4

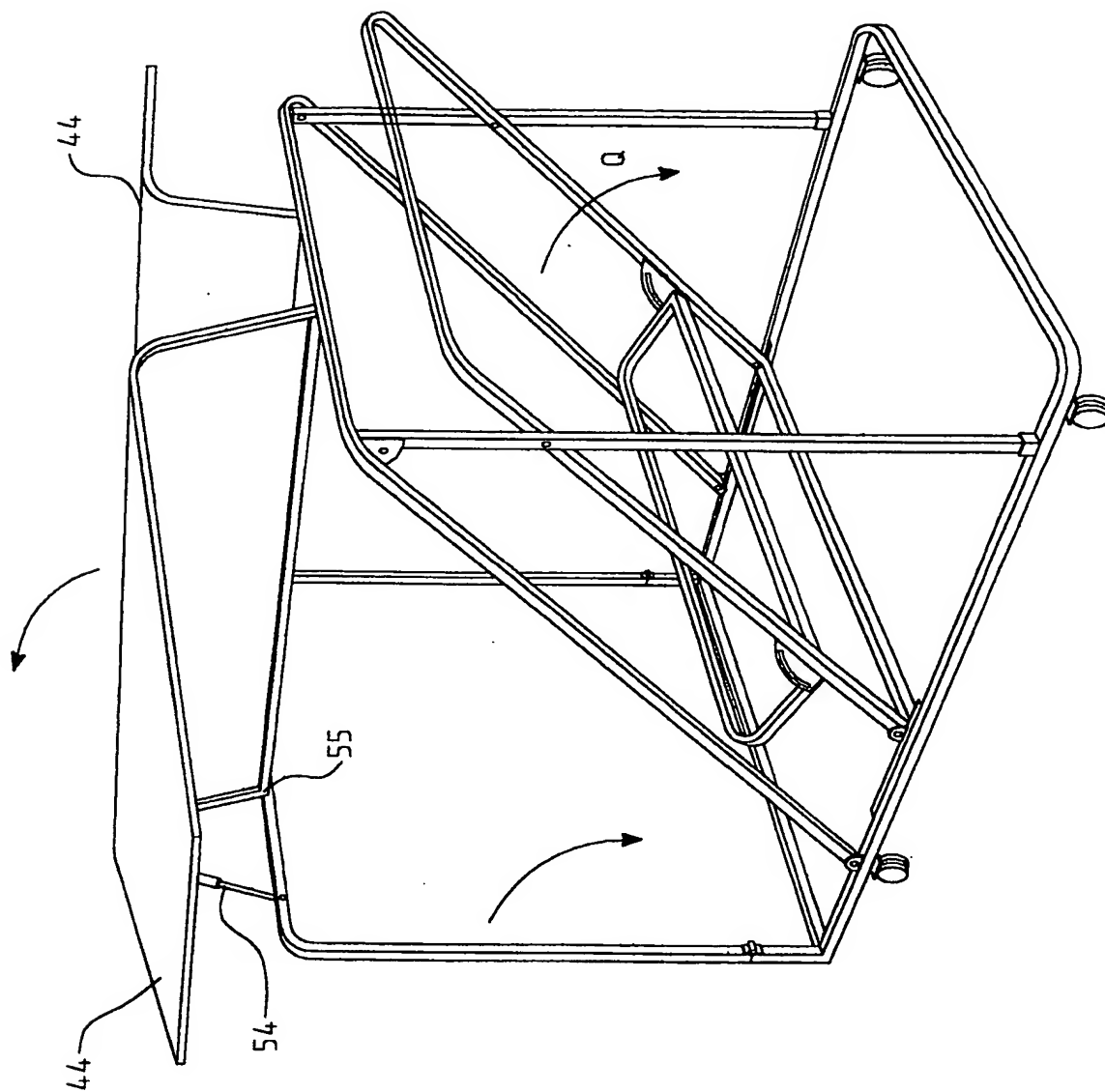


Fig. 5

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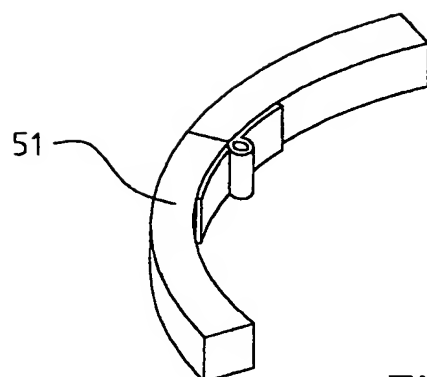


Fig. 6

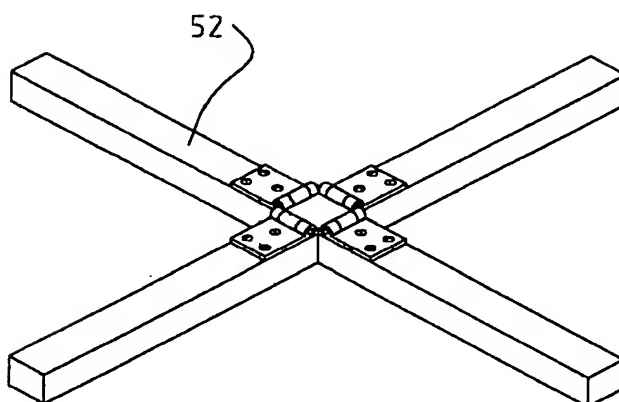


Fig. 7

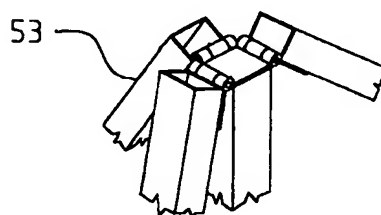


Fig. 8

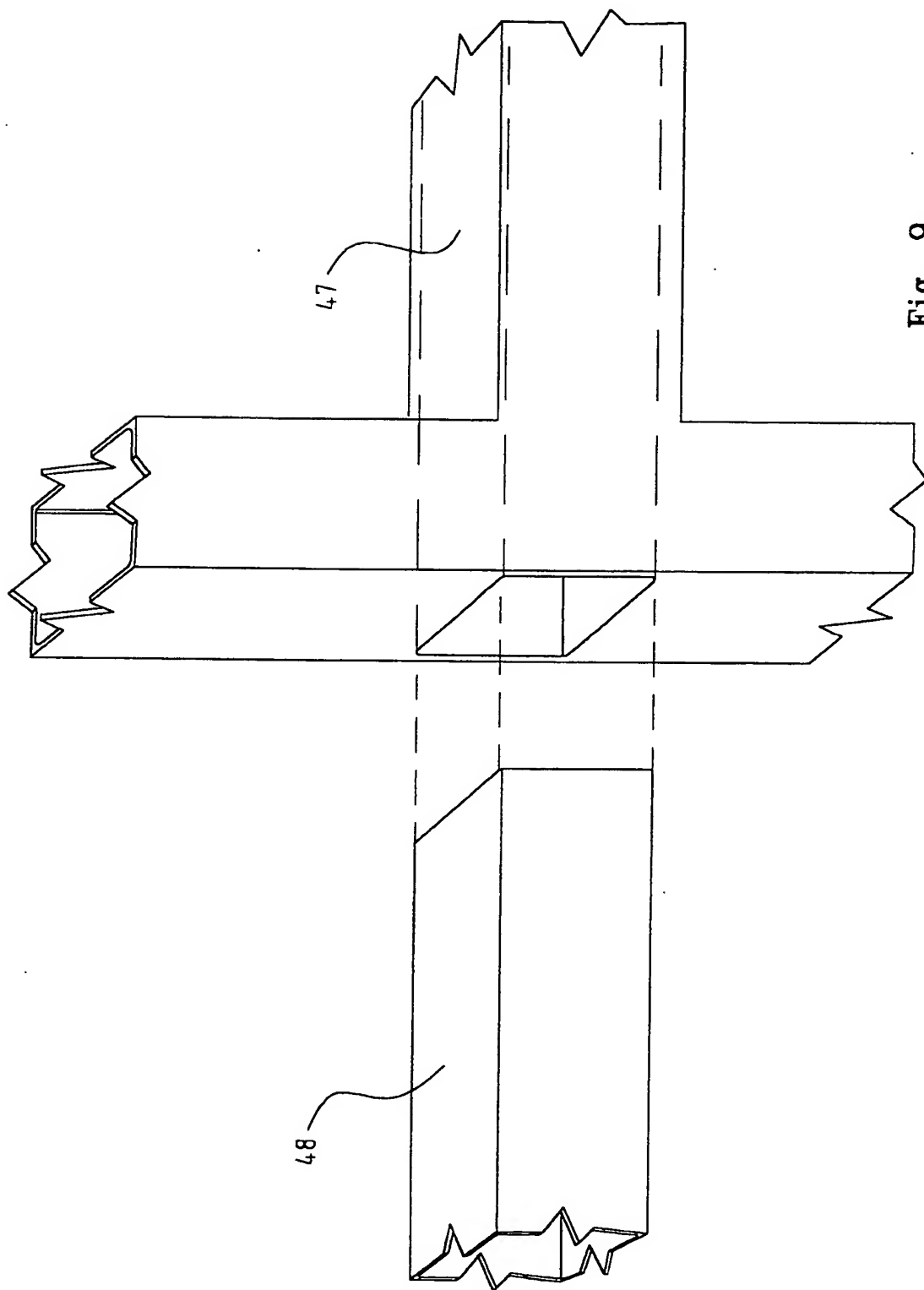


Fig. 9

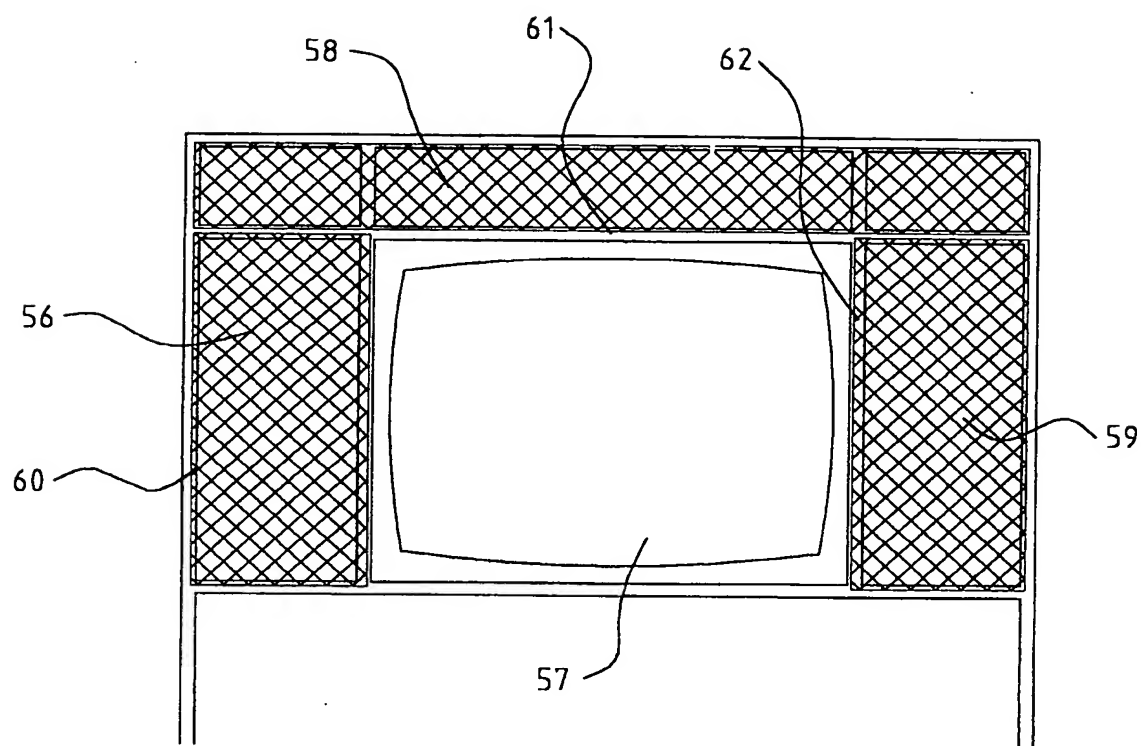


Fig. 10

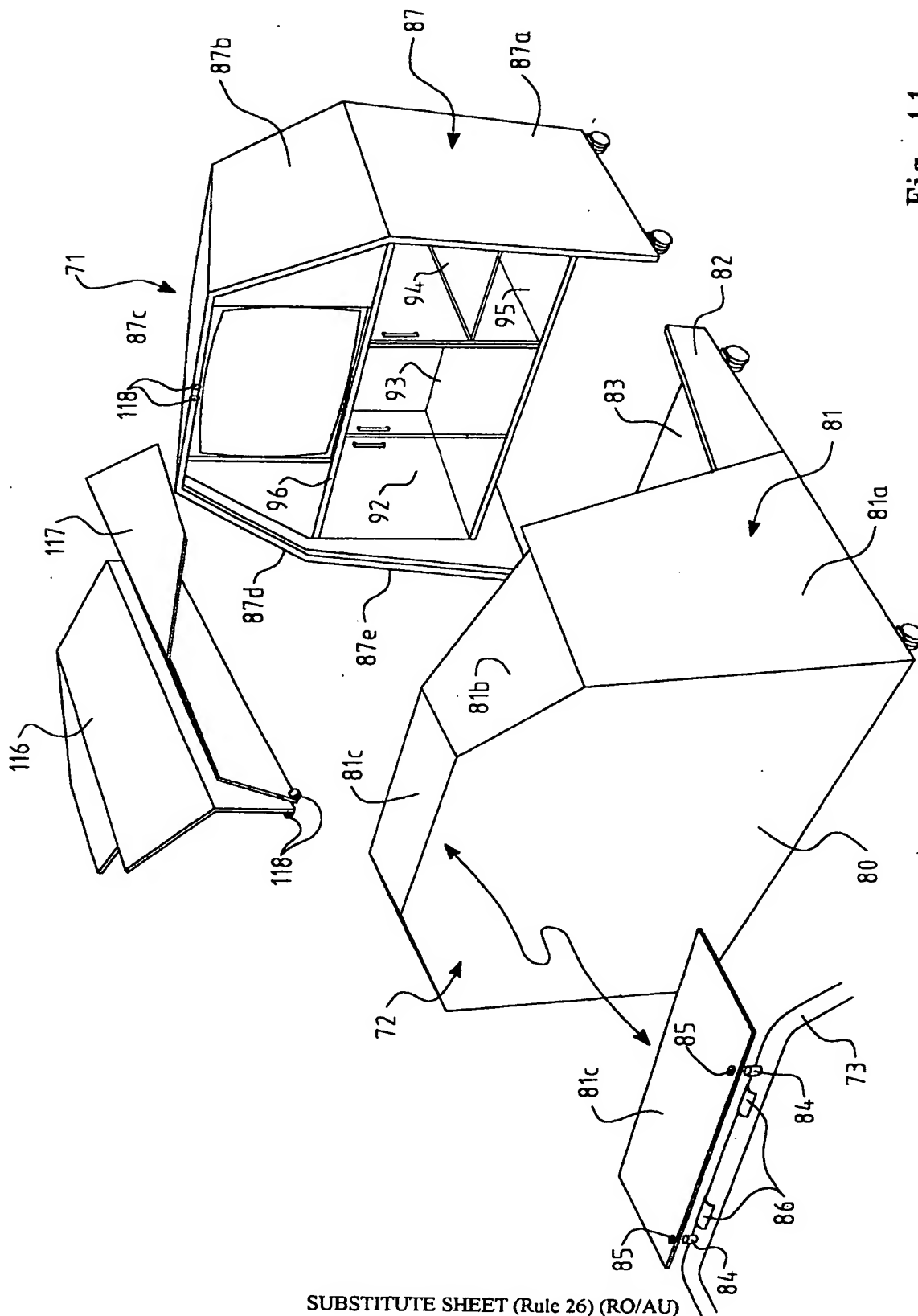


Fig. 11

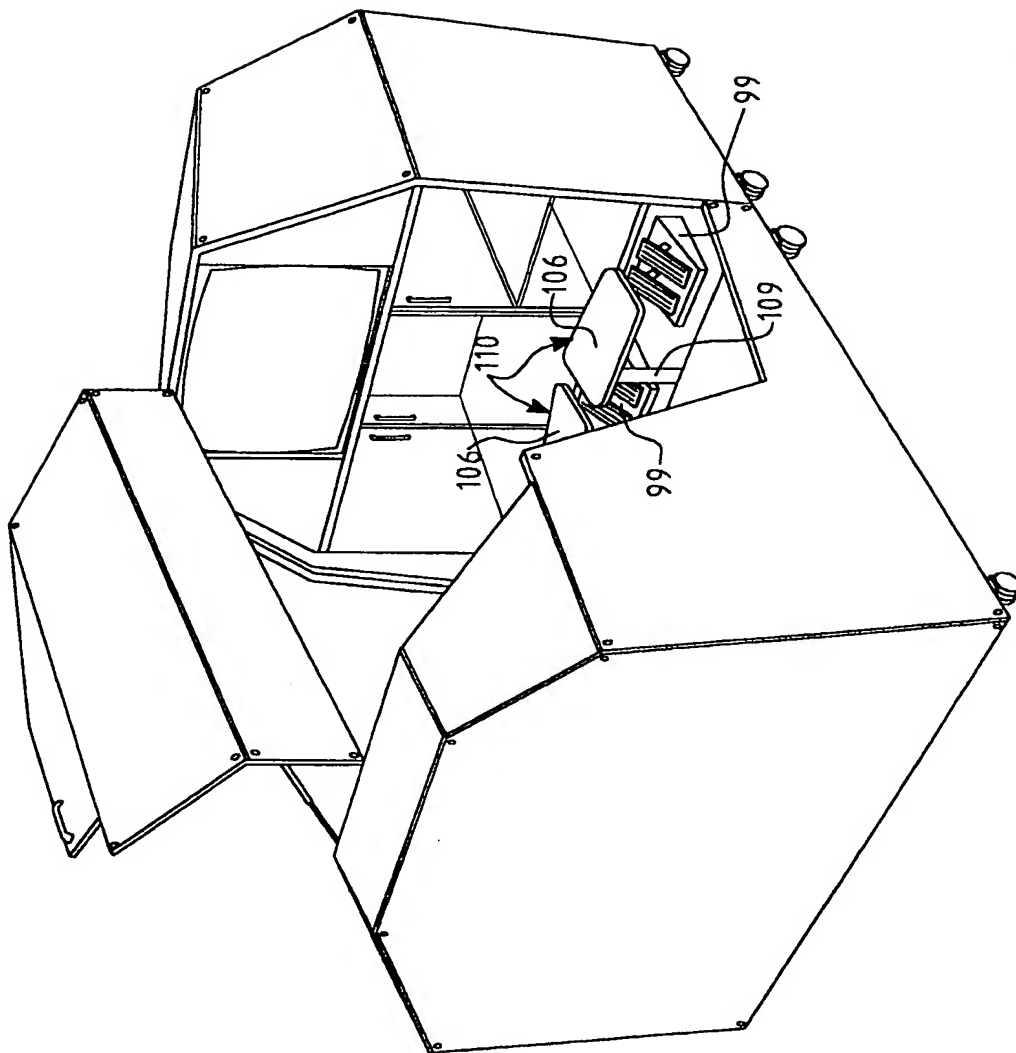


Fig. 12

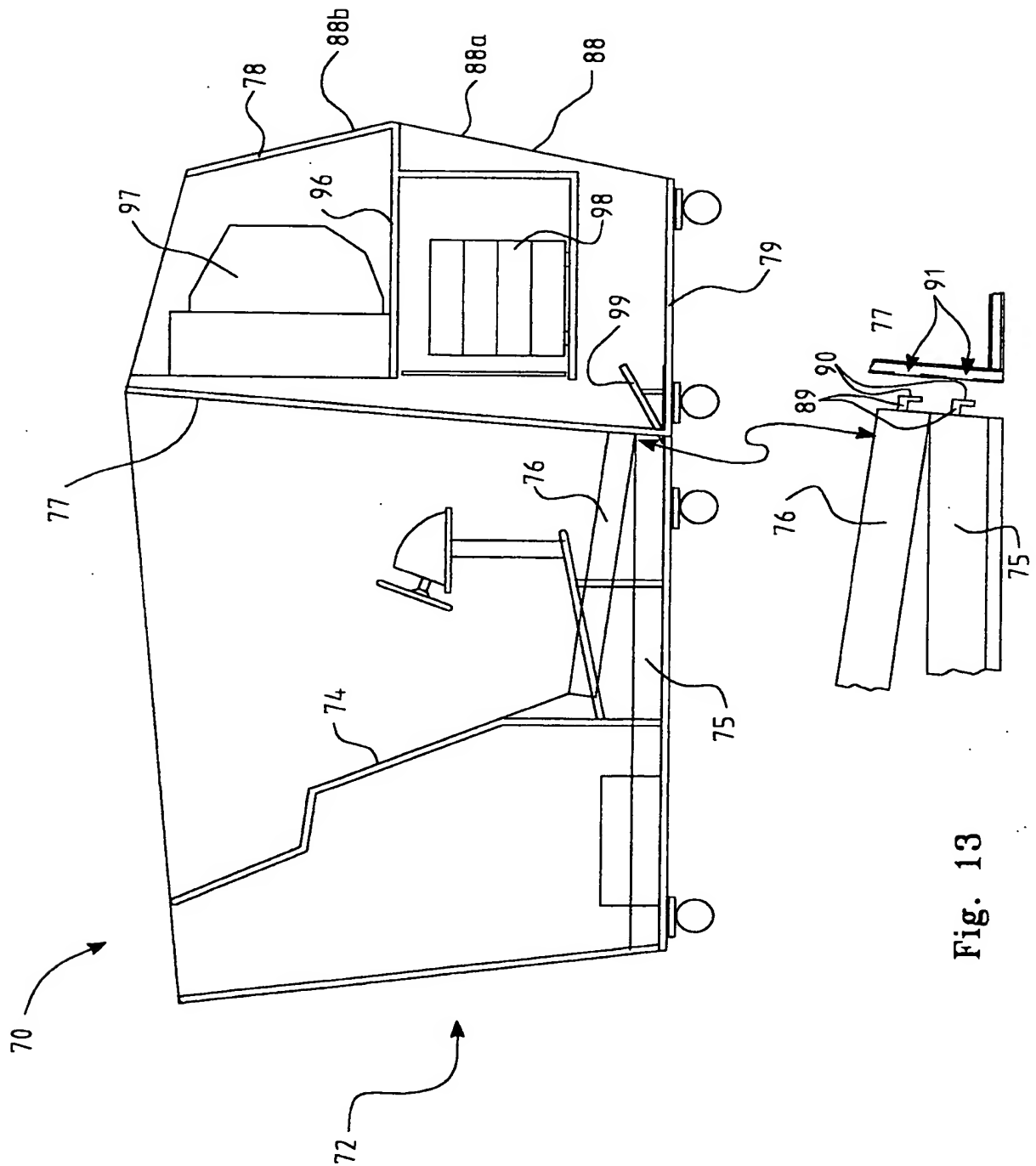


Fig. 13

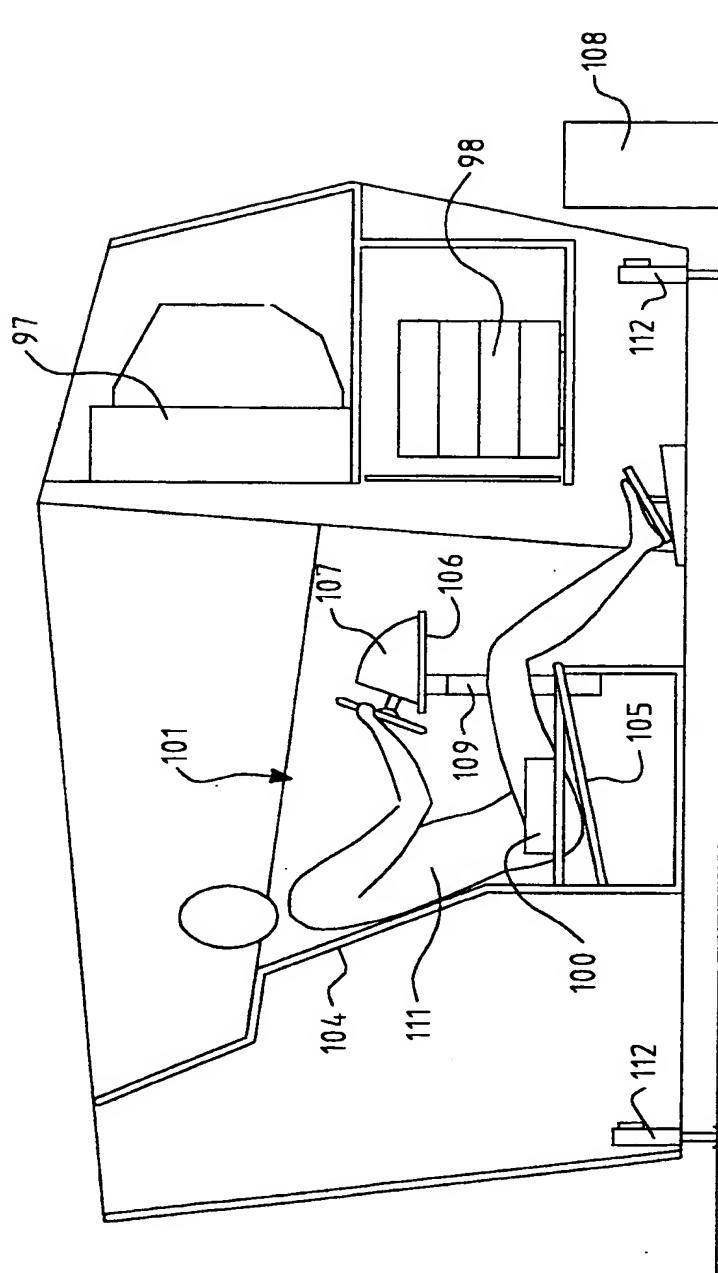


Fig. 14

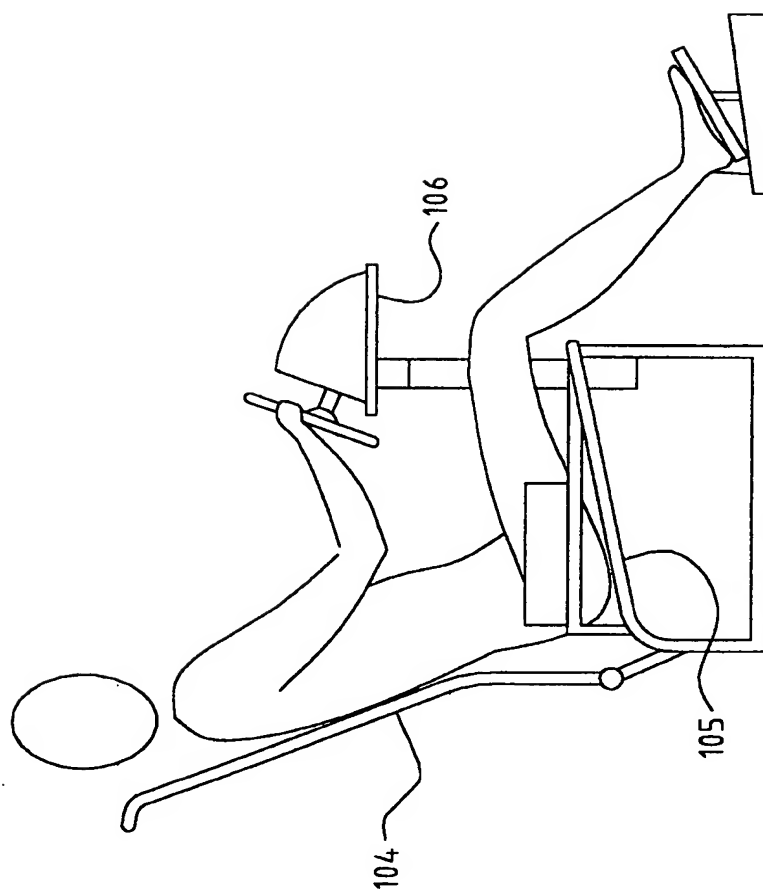


Fig. 15

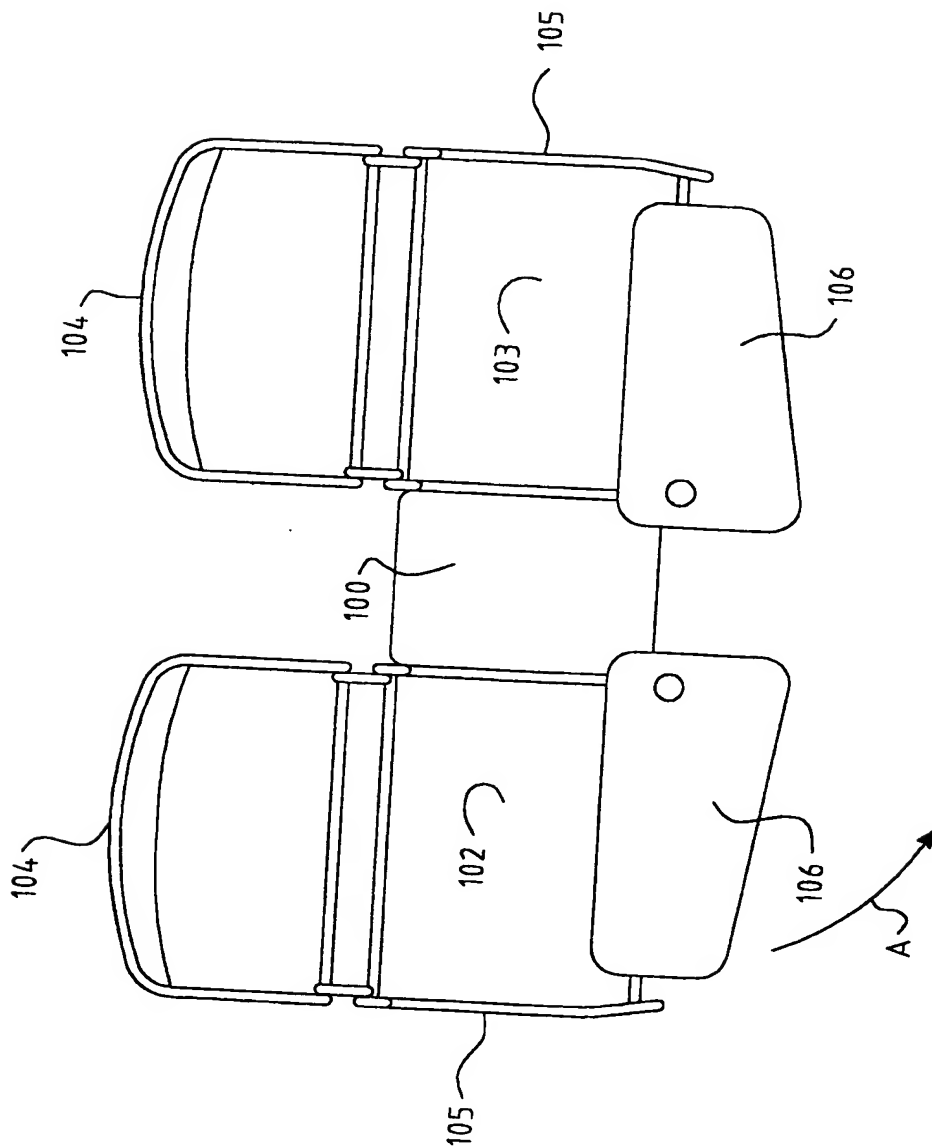


Fig. 16

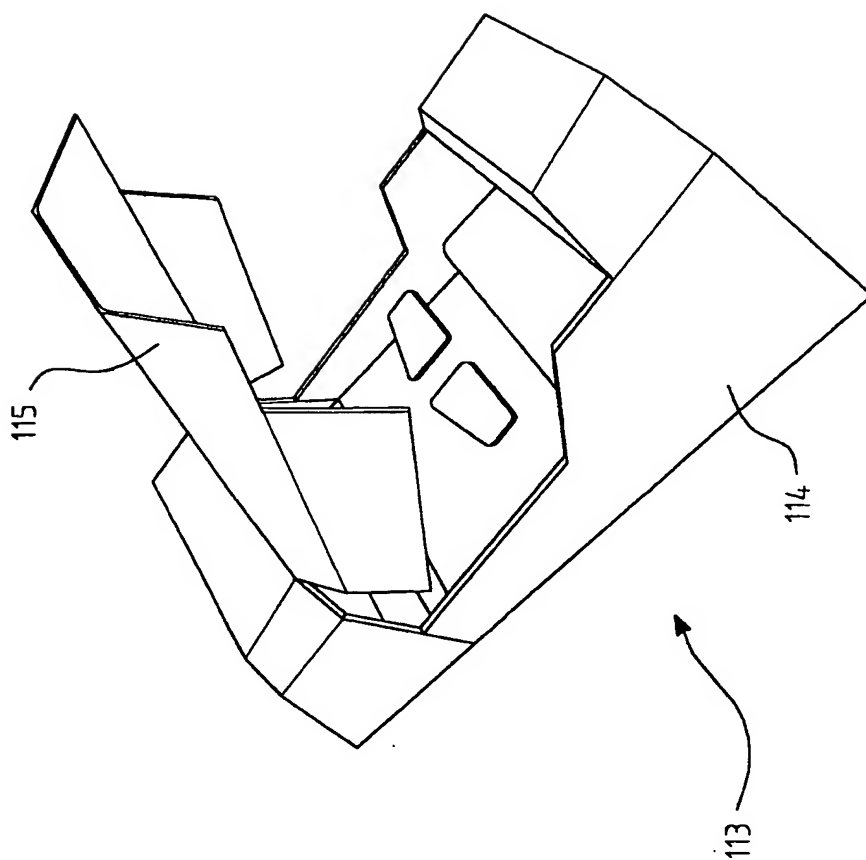


Fig. 17

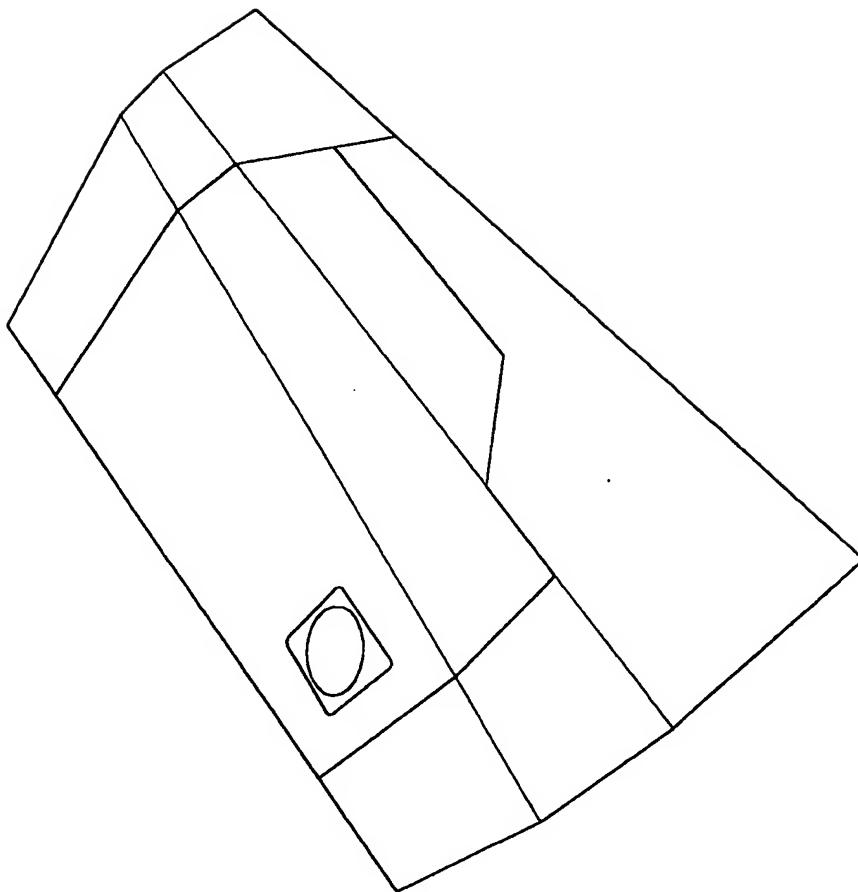


Fig. 18

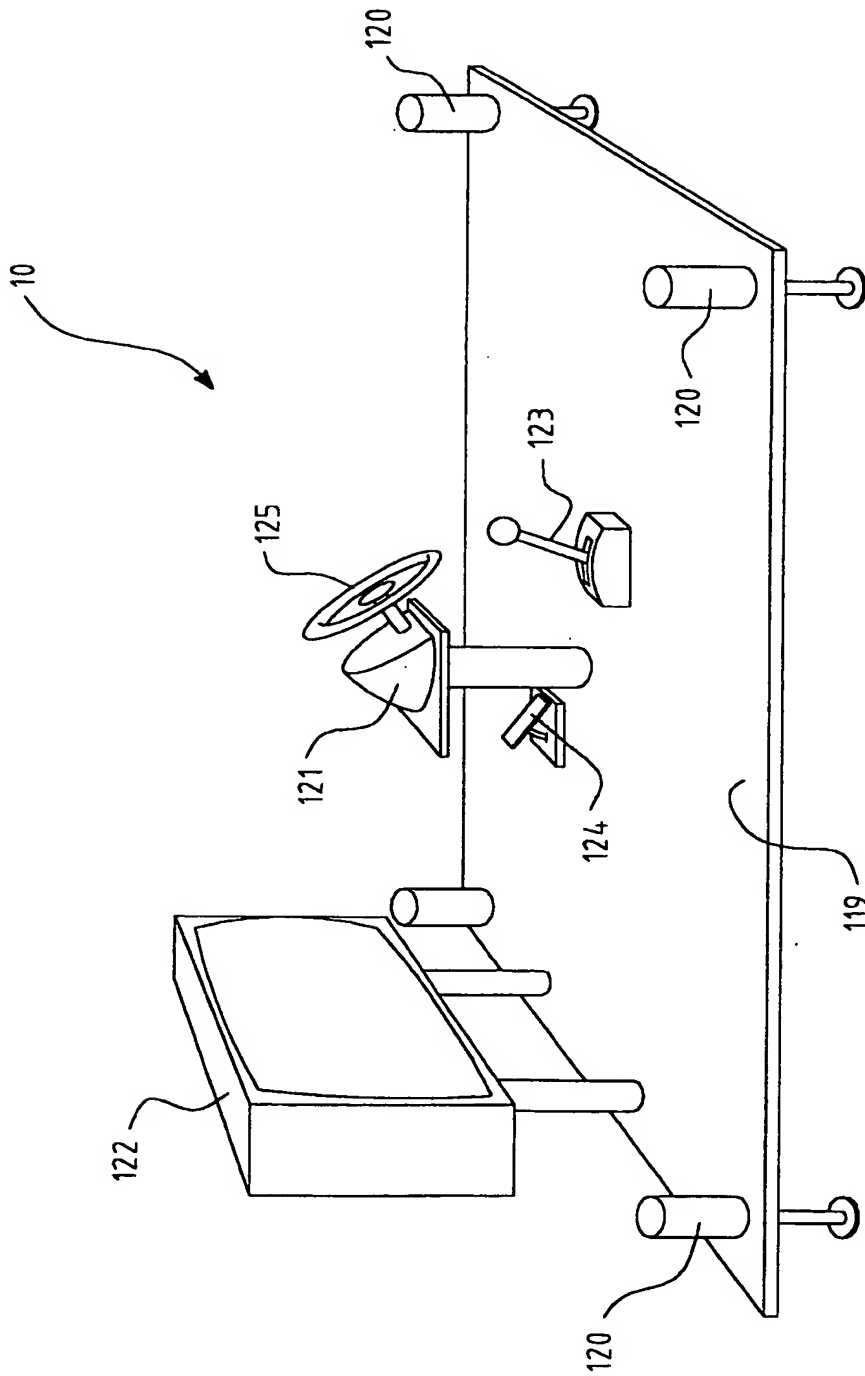


Fig. 19

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU 98/01033

A. CLASSIFICATION OF SUBJECT MATTER																						
Int Cl ⁶ : A63F 9/22, A47B 81/06																						
According to International Patent Classification (IPC) or to both national classification and IPC																						
B. FIELDS SEARCHED																						
Minimum documentation searched (classification system followed by classification symbols) IPC A63F 9/22																						
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched																						
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT: A63F 9/22 and frame or seat or cover or cabinet or simulat																						
C. DOCUMENTS CONSIDERED TO BE RELEVANT																						
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																				
X	DE 3301880 A (GEIGER-AUTOMATENBAU GMBH) 13 September 1984 Figs	1-29																				
X	GB 2282976 A (INTERNATIONAL LASER PRODUCTIONS INC) 26 April 1995 Figs	1-29																				
X	EP 787516 A (KONAMI CO LTD) 6 August 1997 FIGS	1-29																				
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex																						
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A"</td> <td>document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E"</td> <td>earlier application or patent but published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td>"&"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table>			"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family	"P"	document published prior to the international filing date but later than the priority date claimed		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention																			
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone																			
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art																			
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family																			
"P"	document published prior to the international filing date but later than the priority date claimed																					
Date of the actual completion of the international search 11 February 1999		Date of mailing of the international search report 22 FEB 1999																				
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No.: (02) 6285 3929		Authorized officer P. WARD Telephone No.: (02) 6283 2129																				

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 98/01033

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9400206 A (KABUSHIKI KAISHA ACE DENKEN) 6 January 1994 Figs	1-29
X	WO 9316776 A (HUGHES AIRCRAFT CO) 2 September 1993 Figs	1-29
X	WO 9216922 (ATARI GAMES CORP) 10 October 1992 Figs	1-29
X	US 5195746 A (BOYD) 23 March 1993 Figs	1-29
X	DE 4211311 A (NSM AG) 7 October 1993 Figs	1-29

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/AU 98/01033

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
DE	3301880	IT	1199382	JP	59141975		
EP	787516	CN	1166999	JP	9206477		
WO	9400206	AU	43580/93	CN	1083410	US	5807177
		EP	649671				
WO	9316776	CA	2105669	EP	581943		
WO	9216922	EP	580729	US	5299810		
US	5195746	AU	17632/92	WO	9217253		
END OF ANNEX							